

REMARKS

In response to the December 23, 2008 Final Office Action, Applicant submits the following remarks. Currently, claims 1-3, 5-16, and 18-27 are pending in the application with claims 1, 3 and 16 being independent. Claims 1, 3, and 16 have been amended to expedite prosecution of the present application to allowance. Support for these amendments can be found at least on page 6, para. [0022] of the present application's specification and FIGS. 3-4. No new matter has been added.

Interview

Applicants would like to thank the Examiner for the opportunity to discuss the above application during a telephonic interview on April 2, 2009. The following is a summary of the conducted interview.

(1) no exhibits were discussed or shown at the interview;

(2) Claims 1, 3, and 16 were discussed;

(3) U.S. Patent Publ. No. 2004/0073314 to White et al. (hereinafter, "White"), U.S. Patent No. 5,192,327 to Brantigan (hereinafter, "Brantigan"), and U.S. Patent No. 7,309,358 to Berry et al. (hereinafter, "Berry") collectively were discussed;

(4) The Examiner and Applicants have discussed Examiner's 35 U.S.C. 112, first paragraph rejection (See, Final Office Action, page 2). The Examiner proposed amending the independent claims 1, 3, and 16 to clarify the spaced arrangement of the spacing element with regard to the rigid cages, whereby the spacing element is spaced apart from the upper and lower surfaces of the respective rigid cages when the cage assembly is implanted into the spinal column. The Examiner also requested the antecedent basis of the "surfaces" element should be corrected. The Examiner further stated that if such corrections are made, the claims would overcome the cited references. The Examiner further stated that he would consider the present response.

- (5) The Examiner and Applicants did not discuss reaching any agreements.
- (6) No other matters were discussed during the interview.

Even though discussed during the April 2, 2009 Interview, for completeness sake, Applicant presents the following responses to Examiner's rejections in the Final Office Action. Applicant further reiterates and incorporates herein by reference Applicant's arguments submitted in response to the May 19, 2008 Office Action.

35 U.S.C. 112

In the Final Office Action, the Examiner rejected claims 1-3, 5-16 and 18-27 under 35 U.S.C. 112, first paragraph, for failing to comply with the written description requirement. Applicant amended claims 1, 3, and 16 to expedite prosecution of this application to allowance. Support for these amendments is found in Applicant's specification at least on page 6, para. [0022] and FIGS. 3-4. Thus, this rejection is now moot. The Examiner is requested to reconsider and withdraw his rejection of claims 1-3, 5-16, and 18-27.

35 U.S.C. §102

In the Final Office Action, the Examiner rejected claims 1-3, 5-10, 12-16, 18-21 and 23 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Pub. No. 2004/0073314 to White et al. (hereinafter, "White"). Applicant respectfully traverses this rejection.

Amended claim 1 recites, *inter alia*, a cage assembly adapted to be implanted in a spinal column for treating degenerative or ruptured discs and replacing damaged vertebral bodies, said assembly comprising a rigid cage formed in an annular configuration of a biologically inert material, said cage having opposed upper and lower surfaces extending about perimeter portions thereof; an annular side wall extending between said surfaces; a plurality of raised ridges projecting outwardly from each one of said upper and lower surfaces for engaging the spinal column and securing the assembly therein and disposed at offset angles with respect to each other; wherein at least one of said surfaces of said cage defines a plurality of indexing members thereon and wherein said cage assembly includes at least one spacing element adapted to be secured to said one cage for the stacked attachment of said cage with a second cage, said indexing members cooperating with portions of said spacing element for axially aligning said spacing element with said one cage, said spacing element is configured to have flat upper and

lower surfaces that do not include said raised ridges and is further configured to be spaced apart from respective upper and lower surfaces of said cage and said second cage when said cage assembly is implanted into the spinal column; a plurality of spaced apertures in said side wall for use in positioning said cage in the spinal column in a desired angular orientation; and a pair of axially aligned openings extending axially through said cage, said openings being adapted to be packed with bone graft material to expedite the fusion of the cage assembly in the spinal column.

As understood by Applicant, White discloses a vertebral replacement device for supporting adjacent vertebrae and that includes a vertebral body member having at least one upper or lower disc replacement member engaged thereto at one end thereof. (White, Abstract). White's vertebral replacement device includes a vertebral body member having an upper and lower disc replacement members coupled to the vertebral body member at the top and bottom, respectively. (White, FIGS. 12-14, para. [0083]). The vertebral body member includes end surfaces that include a concave curvature in at least one direction transverse to longitudinal axis to provide a solid bearing relationship with an adjacent convex surface of the disc replacement members. (White, para. [0083]). As illustrated, in White's FIG. 12, the disc replacement devices are disposed with regard to the vertebral body member flush against the vertebral body. (White, FIG. 12). This is different than claim 1's recitation of a spacing element configured to be spaced apart from respective upper and lower surfaces of the cage and the second cage when the cage assembly is implanted into the spinal column. (emphasis supplied). Further, the top and bottom surfaces of White's vertebral body are curved (i.e., concave), as such they are not flat, contrary to the recitation of claim 1 of a spacing element configured to have flat upper and lower surfaces. (emphasis supplied). Thus, White fails to disclose all elements of claim 1 and thus, does not anticipate it. Applicant respectfully requests allowance of claim 1.

Claims 2-3, 5-10, 12-16, 18-21 and 23 are not anticipated by White for at least the reasons stated above with regard to claim 1. Thus, the rejection of claims 2-3, 5-10, 12-16, 18-21 and 23 is respectfully traversed. The Examiner is requested to reconsider and withdraw the rejection of claims 2-3, 5-10, 12-16, 18-21 and 23.

35 U.S.C. §103

In the Final Office Action, the Examiner rejected claim 11 under 35 U.S.C. § 103 as being unpatentable over White. Applicant respectfully traverses this rejection.

White fails to disclose all claimed elements, as recited in the amended claim 3 for at least the reasons stated above with regard to claim 1 above. Since claim 11 is dependent on the independent claim 3, White fails to render claim 11 obvious for at least the reasons stated above with regard claim 3.

In the Final Office Action, the Examiner has rejected claim 22 and 24 under 35 U.S.C. § 103 as being obvious over White in view of U.S. Patent No. 5,192,327 to Brantigan (hereinafter, "Brantigan"). Applicant respectfully traverses this rejection.

Claims 22 and 24 are dependent on independent claim 16. As such, claims 22 and 24 is patentable over White for at least the reasons stated above with regard to claim 16. Brantigan fails to cure the deficiencies of White. As understood by Applicant, Brantigan discloses a surgical prosthetic implant that is used singularly or stacked together to support and fuse together adjacent vertebrae or to totally or partially replace one or more vertebrae in a vertebral column. (Brantigan, Abstract). Brantigan further includes ridges that are formed longitudinally across the end faces of the implant. (Brantigan, FIG. 1, Col. 4, lines 15-19). The ridges further define peaks and valleys that are configured to allow stocking of one implant on top of the other. (Brantigan, FIGS. 1-5). Thus, Brantigan ridges are parallel to each other. This is different than the present invention, where raised ridges are disposed at offset angles with respect to each other, as recited in claim 16. Further, Brantigan also fails to disclose, teach or suggest that the spacing element is configured to have flat upper and lower surfaces that do not include the raised ridges and is further configured to be disposed in a spaced arrangement with the cage and the second cage, as recited in claim 16. As such, Brantigan fails to disclose all elements of claim 16. Thus, claims 22 and 24 are patentable over White, Brantigan or their combination for at least the reasons stated above with regard to claim 16. As such, the rejection of claims 22 and 24 is respectfully traversed. The Examiner is requested to reconsider and withdraw his rejection of claims 22 and 24.

In the Final Office Action, the Examiner rejected claims 1, 3, 16 and 24-27 under 35 U.S.C. § 103 as being obvious over U.S. Patent No. 7,309,358 to Berry (hereinafter, "Berry") in view of Brantigan. Applicant respectfully traverses this rejection.

As understood by Applicants, Berry discloses vertebral body and disc space replacement devices (Berry, Abstract). Berry has a similar structure to White. In fact, both Berry and White

are continuation in part based on the same patent application no. 10/103,237. Thus, Berry suffers from the same deficiencies as White. Specifically, Berry discloses a stacked arrangement of disc replacement devices, where such devices are disposed flush against each other. (Berry, FIGS. 24-29, 35). In its other configurations, Berry includes a vertebral body member (similar to White) that is also disposed flush against the disc replacement devices, where the vertebral body member includes surfaces that are not flat (Berry, FIGS. 12-13). Thus, Berry fails to disclose the spacing element is configured to have flat upper and lower surfaces that do not include the raised ridges and is further configured to be spaced apart from respective upper and lower surfaces of said cage and said second cage when said cage assembly is implanted into the spinal column as recited in claim 1. (emphasis supplied). Instead, Berry's arrangement does not allow any spacing or any flat surfaces on its vertebral body member. As stated above, White suffers from the same drawbacks. Thus, the combination of Berry and White fails to disclose, teach or suggest the spacing element is configured to have flat upper and lower surfaces that do not include the raised ridges and is further configured to be spaced apart from respective upper and lower surfaces of said cage and said second cage when said cage assembly is implanted into the spinal column, as recited in claim 1. Thus, neither Berry, White, nor their combination render claim 1 obvious. As such, this rejection is respectfully traversed and Applicant requests allowance of claim 1.

Claims 3, 16, and 24-27 are not rendered obvious by the combination of Berry and White for at least the reasons stated above with regard to claim 3. As such, the rejection of claims 3, 16, and 24-27 is respectfully traversed. The Examiner is requested to reconsider and withdraw his rejection of claims 3, 16, and 24-27.

Conclusion


No new matter has been added. The claims currently presented are proper and definite. Allowance is accordingly in order and respectfully requested. However, should the Examiner deem that further clarification of the record is in order, we invite a telephone call to the Applicants' undersigned attorney to expedite further processing of the application to allowance.

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (212) 935-3000.

The Commissioner is authorized to charge any fees that may be due to the undersigned's account, Deposit Account No. **50-0311**, Reference No. **26786-520-NATL**. Please address all correspondence to Customer Number **35437**.

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Respectfully submitted,



Brian P. Hopkins, Reg. No. 42,669
Boris A. Matvenko, Reg. No. 48,165
Attorneys for Applicant
c/o MINTZ LEVIN COHN FERRIS
GLOVSKY & POPEO, P.C.
Chrysler Center
666 Third Avenue, 24th Floor
New York, NY 10017
Tel: (212) 935-3000
Fax: (212) 983-3115